

## APPENDIX.

THE following Appendix contains descriptions of a few species, which were omitted to be noticed in their proper places; and further remarks with respect to some, which will be found in the body of the work.

## FAMILY.—PERCIDÆ.

1. *APHRITIS UNDULATUS*. Jen.

PLATE XXIX. fig. 1.

*A. elongatus*: lateribus supra pallide olivaceis, fasciis transversis abbreviatis, lineisque longitudinaliter undantibus, nigris; lateribus infra argenteis: pinnis dorsalibus et caudali punctatis; pinnis, reliquis, et lineâ laterali, albidis.

B. 6; D. 8—25; A.  $1/22$ ; C. 14, et 6 brevioribus; P. 22; V.  $1/5$ .

LONG. unc. 3. lin. 1.

FORM.—Elongated; the depth about one-sixth of the entire length; the thickness two-thirds of the depth. Head four-and-a-half times in the length. Profile falling very gradually at first, but more rapidly in advance of the eyes, causing the snout to appear rather obtuse. Mouth small: maxillary slender, hardly reaching to a vertical line from the anterior margin of the orbit: upper jaw slightly longer than the lower, and very protractile. Teeth very minute, forming a narrow velutine band: a patch on the chevron of the vomer scarcely visible, but capable of being very distinctly felt; none apparent on the palatines. Eye one-fourth the length of the head, and distant one diameter from the end of the snout; the interocular space rather less than the diameter. Snout slightly indented, or furrowed out in front of the eyes. A series of impressions on the lower jaw, and along the limb of the preopercle, but much less obvious than in the next species, and not distinctly porous. Preopercle with the ascending margin vertical, the angle at bottom rounded; the limb broad and distinctly marked, with the boundary line between it and the cheek slightly elevated into a ridge. The opercle, with its membrane, produced backwards in an angle, the subopercle being visible beneath. The branchial membrane six-rayed, and fastened to the isthmus underneath, the aperture commencing beneath the ascending margin of the preopercle.

Lateral line commencing at the upper angle of the gill-opening, and following the curvature of the back at one-fourth of the depth, and preserving this direction throughout its course, not

falling to the middle before losing itself in the caudal. Scales small, covering the whole head and body, except the snout in front of the eyes, the jaws, and the limb of the preopercle. The free portion of each scale marked with several small concentric circles, the free edge finely ciliated: the basal portion with a fan of seven striae, and the spaces between these deeper striae with minuter striae running transversely: the basal margin cut square.

Pectorals attached rather low down, and a little posterior to the terminating angle of the opercle; their length about three-fourths that of the head: the fourth to the eighth rays longest; the first ray only half the length of the second; the first two, and the last three or four, simple; the rest branched. Ventrals about four-fifths the length of the pectorals, and in advance of those fins by nearly half their own length; their spine very distinct. First dorsal short, commencing immediately above the insertion of the pectoral: all the spines very slender, with the intervening membrane delicate; the second longest, equalling about half the depth; the third and following ones gradually decreasing. Second dorsal long, separated from the first by a very small interval, and occupying a space just equal to the distance between its commencement and the end of the snout: the rays gradually decreasing in length from the anterior ones, which equal three-fourths of the depth; all simple, or if branched, only so at their extreme tips. The interval between the second dorsal and the caudal contained eight-and-a-half times in the entire length. Anal commencing under the sixth ray of the second dorsal, or exactly at the middle point of the entire length, caudal excluded; extending a trifle beyond the second dorsal, but in other respects answering to that fin. Caudal square when spread, but very slightly notched when the rays are close; contained six-and-a-half times in the entire length; the principal rays branched.

COLOUR.—(*In spirits*.) Back and upper half of the sides pale olivaceous, with about seven or eight abbreviated, transverse, dusky fasciæ; beneath these are two irregular lines undulating longitudinally in a zig-zag manner, and having rather a tendency to meet at the angles, so as to form a connected longitudinal chain of diamond-shaped links. Lower portion of the sides and abdomen silvery. Tubal pores of the lateral line white, making this line very evident. Dorsal and caudal fins speckled with small dusky spots and points. Pectorals, ventrals, and anal, quite plain, and whitish.

A second specimen in the collection exactly resembles the above, except in being not quite so large, and in having a ray less in each of the two dorsal fins.

Habitat, Chonos Archipelago, W. coast of S. America.

The genus *Aphritis* was first established by M. Valenciennes, in the appendix to the eighth volume of the "Histoire des Poissons," for the reception of a small Percoid fish obtained by MM. Quoy and Gaimard in Van Dieman's Land, inhabiting fresh-water. The species above described, which was taken by Mr. Darwin in Lowe's Harbour, South of Chiloe, appears to be referable to the same genus. It differs, however, in many respects from the *A. Urvillii*, the only one which Valenciennes has noticed. The relative situation of the first dorsal with respect to the pectorals, and of the anal with respect to the second dorsal, is different: there are fewer rays in the anal, and more in the second dorsal: the upper, instead of the lower jaw, as represented in Valenciennes's figure, is